



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D4202-1**

**Job Sheet 171452**



Part No: D4202-1

Job Qty: 500 ea

Part Name: Spacer



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/1/18

Job Tracking No:

Due Date: 2/16/18

Created By: Linda Lacelle

Type: Stock

Description:

Note: DWG REV C IPP REV:A NEW ISSUE 10-12-07 JLM VERIFIED:DD IPP REV:B AS PER REV B 11-04-05 JLM  
VERIFIED BY:DD IPP Rev:C 11.12.19 PER DWG REV.C DD verf:EC

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty     | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |  | Lead Time | Sign-off    |
|-------|--------------------|---------|------------|----------|-----------|---------|-----------------------|--|-----------|-------------|
|       |                    |         |            |          | Setup hrs | Run Hrs | Workcenter / Supplier |  |           |             |
| 90    | Start up Operation | 500 Ea  |            | 2/15/18  | 0.00      | 0.00    | Start Up Machining-2  |  |           | DAS 23 9-89 |
| 100   | Hardinge           | 500 pcs |            | 2/15/18  | 0.00      | 21.28   | Hardinge              |  |           |             |
| 120   | QC                 | 500 pcs |            | 2/15/18  | 0.00      | 0.00    | QC8                   |  |           | FL 18-2-6   |
| 130   | Outsource          | 500 pcs |            | 2/15/18  |           |         | MEI001-VC Outsource 1 |  |           | AT 18/02/23 |
| 140   | Packaging          | 500 pcs |            | 2/15/18  | 0.00      | 0.00    | Packaging2            |  |           | AT 18/02/23 |
| 150   | QC                 | 500 pcs |            | 2/15/18  | 0.00      | 0.00    | QC6                   |  |           | EB          |
| 160   | HandFinish         | 500 pcs |            | 2/16/18  | 0.00      | 2.50    | HandFinish4           |  |           | JY          |
| 190   | Packaging          | 500 pcs |            | 2/16/18  | 0.00      | 0.00    | Packaging3-2          |  |           | JY          |
| 200   | QC21-SA            | 500 Ea  |            | 2/16/18  | 0.00      | 0.00    | QC21                  |  |           | ms 18/03/09 |

Part Op 100 - 1- Machine as per Folio FB015 \*\*\*DO NOT CHAMFER OUTSIDE DIA\*\*\*

Descriptions: 130 - \*\*\*HEAT TREAT AS PER DWG D4202\*\*\* 410: 24143

160 - WASH SPACER AS PER QSI005

190 - \*\*\*STOCK IN SKIDTUBE CELL\*\*\*

PO 038999.

FEB 09 2018

DAS  
21  
9-89

MAR 17 2018

### Job BOM

| Part / Item        | Component Name                 | Quantity        | Operation             | Container |
|--------------------|--------------------------------|-----------------|-----------------------|-----------|
| M6061T6T0.500W.058 | 6061-T6 Round Tube .500 X.058W | 175 ft (.35 ea) | 90-Start up Operation |           |

### Job Allocations

| Operation             | Component Part     | Required | Inventory | Allocated |
|-----------------------|--------------------|----------|-----------|-----------|
| 90-Start up Operation | M6061T6T0.500W.058 | 175      | 223       | 0         |

### Part Specifications

| Spec No | Description | Target/Tolerance               | Limits         | Type    | Special Comments |
|---------|-------------|--------------------------------|----------------|---------|------------------|
| 1       | Spacer      | 0.500inches ± 0.010            | 0.510<br>0.490 | Product |                  |
| 2       | Spacer      | 0.058inches ± 0.010            | 0.068<br>0.048 | Product |                  |
| 3       | Spacer      | 4.145inches + 0.030<br>- 0.010 | 4.175<br>4.135 | Product |                  |

# WORK ORDER NON-CONFORMANCE / UPDATE



QA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

| <p><b>Dart Aerospace Ltd.</b><br/>1270 Aberdeen Street<br/>Hawkesbury, ON K6A 1K7<br/>CANADA<br/>TEL.: 1 613 632-5200<br/>Email: sales@dartaero.com<br/>www.dartaerospace.com</p> | <p><b>DART AEROSPACE</b><br/><b>S039216</b></p> <p style="text-align: center;">Spacer</p> <p><b>PART NO: D4202-1</b><br/><b>Original Serial #: S039216</b><br/><b>Revision:</b><br/><b>Operation: Start up Operation 02/05/18</b><br/><b>Change No:</b></p> <p style="text-align: center;">Job No: 171452</p> | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="5" style="text-align: left;">AGAINST DEPARTMENT/PROCESS</th> </tr> <tr> <td style="width:15%;">rk <input type="checkbox"/></td> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Cross tube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>ap <input type="checkbox"/></td> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>is <input type="checkbox"/></td> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>ed <input type="checkbox"/></td> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> <tr> <td colspan="3">QTY Effective :</td> <td colspan="2">MRB (QSI042) Approval</td> </tr> <tr> <td colspan="3" style="text-align: center;">Disposition</td> <td colspan="2">Completed By</td> </tr> <tr> <td colspan="3" rowspan="2"></td> <td colspan="2">Lead hand / Supervisor Approval Verification</td> </tr> <tr> <td colspan="2">QC / QA Coordinator Approval</td> </tr> </table>                                                                                                                                                                                                                                                                                     | AGAINST DEPARTMENT/PROCESS                   |                                      |                |  |  | rk <input type="checkbox"/>               | Skid-tube <input type="checkbox"/>        | Cross tube <input type="checkbox"/>       | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/>   | ap <input type="checkbox"/>                 | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>    | Quality <input type="checkbox"/>              | is <input type="checkbox"/>   | Thermoforming <input type="checkbox"/>  | Finishing <input type="checkbox"/>                         | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>             | ed <input type="checkbox"/>            | Large Fab <input type="checkbox"/>       | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>    |                                  | QTY Effective :                  |                                        |                                     | MRB (QSI042) Approval           |                                                          | Disposition                           |                                  |                                      | Completed By                                   |                                           |  |  |  | Lead hand / Supervisor Approval Verification |  | QC / QA Coordinator Approval |  |
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| AGAINST DEPARTMENT/PROCESS                                                                                                                                                        |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| rk <input type="checkbox"/>                                                                                                                                                       | Skid-tube <input type="checkbox"/>                                                                                                                                                                                                                                                                            | Cross tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| ap <input type="checkbox"/>                                                                                                                                                       | Machining <input type="checkbox"/>                                                                                                                                                                                                                                                                            | Small Fab <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| is <input type="checkbox"/>                                                                                                                                                       | Thermoforming <input type="checkbox"/>                                                                                                                                                                                                                                                                        | Finishing <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| ed <input type="checkbox"/>                                                                                                                                                       | Large Fab <input type="checkbox"/>                                                                                                                                                                                                                                                                            | Composite <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Supplier <input type="checkbox"/>            |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| QTY Effective :                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | MRB (QSI042) Approval                        |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| Disposition                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Completed By                                 |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
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| <p>En _____</p> <p>Equ _____</p> <p>Ha _____</p> <p>Internal _____</p> <p>Tribal K _____</p>                                                                                      |                                                                                                                                                                                                                                                                                                               | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: left;">FAULT CATEGORY</th> </tr> <tr> <td style="width:33%;"><input type="checkbox"/> Temperature/Cure</td> <td style="width:33%;"><input type="checkbox"/> Power Loss/Surge</td> <td style="width:33%;"><input type="checkbox"/> Positioned Wrong</td> </tr> <tr> <td><input type="checkbox"/> Set-up</td> <td><input type="checkbox"/> Folio/Program</td> <td><input type="checkbox"/> Outside Dimensions</td> </tr> <tr> <td><input type="checkbox"/> BOM/Route</td> <td><input type="checkbox"/> Grain</td> <td><input type="checkbox"/> Over/Under tolerance</td> </tr> <tr> <td><input type="checkbox"/> Broken/Damage/Defect</td> <td><input type="checkbox"/> Weld</td> <td><input type="checkbox"/> Part Incorrect</td> </tr> <tr> <td><input type="checkbox"/> Inspection Incomplete/Unqualified</td> <td><input type="checkbox"/> Wrong Stock Pulled</td> <td><input type="checkbox"/> Part Lost/Missing</td> </tr> <tr> <td><input type="checkbox"/> Contamination</td> <td><input type="checkbox"/> Out of Sequence</td> <td><input type="checkbox"/> Part Moved</td> </tr> <tr> <td><input type="checkbox"/> Countersink</td> <td><input type="checkbox"/> Off-set</td> <td><input type="checkbox"/> Drawing</td> </tr> <tr> <td><input type="checkbox"/> Cut Too Short</td> <td><input type="checkbox"/> Mislabeled</td> <td><input type="checkbox"/> Finish</td> </tr> <tr> <td><input type="checkbox"/> Instructions Incomplete/Unclear</td> <td><input type="checkbox"/> Fit/Function</td> <td><input type="checkbox"/> Misread</td> </tr> <tr> <td><input type="checkbox"/> Drill Holes</td> <td><input type="checkbox"/> Misaligned/off center</td> <td><input type="checkbox"/> Turning Sequence</td> </tr> </table> |                                              |                                      | FAULT CATEGORY |  |  | <input type="checkbox"/> Temperature/Cure | <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Positioned Wrong | <input type="checkbox"/> Set-up    | <input type="checkbox"/> Folio/Program | <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Grain     | <input type="checkbox"/> Over/Under tolerance | <input type="checkbox"/> Broken/Damage/Defect | <input type="checkbox"/> Weld | <input type="checkbox"/> Part Incorrect | <input type="checkbox"/> Inspection Incomplete/Unqualified | <input type="checkbox"/> Wrong Stock Pulled  | <input type="checkbox"/> Part Lost/Missing | <input type="checkbox"/> Contamination | <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Part Moved | <input type="checkbox"/> Countersink | <input type="checkbox"/> Off-set | <input type="checkbox"/> Drawing | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Mislabeled | <input type="checkbox"/> Finish | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Misread | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Turning Sequence |  |  |  |                                              |  |                              |  |
| FAULT CATEGORY                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Temperature/Cure                                                                                                                                         | <input type="checkbox"/> Power Loss/Surge                                                                                                                                                                                                                                                                     | <input type="checkbox"/> Positioned Wrong                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Set-up                                                                                                                                                   | <input type="checkbox"/> Folio/Program                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Outside Dimensions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> BOM/Route                                                                                                                                                | <input type="checkbox"/> Grain                                                                                                                                                                                                                                                                                | <input type="checkbox"/> Over/Under tolerance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Broken/Damage/Defect                                                                                                                                     | <input type="checkbox"/> Weld                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> Part Incorrect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Inspection Incomplete/Unqualified                                                                                                                        | <input type="checkbox"/> Wrong Stock Pulled                                                                                                                                                                                                                                                                   | <input type="checkbox"/> Part Lost/Missing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Contamination                                                                                                                                            | <input type="checkbox"/> Out of Sequence                                                                                                                                                                                                                                                                      | <input type="checkbox"/> Part Moved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Countersink                                                                                                                                              | <input type="checkbox"/> Off-set                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Drawing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Cut Too Short                                                                                                                                            | <input type="checkbox"/> Mislabeled                                                                                                                                                                                                                                                                           | <input type="checkbox"/> Finish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Instructions Incomplete/Unclear                                                                                                                          | <input type="checkbox"/> Fit/Function                                                                                                                                                                                                                                                                         | <input type="checkbox"/> Misread                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <input type="checkbox"/> Drill Holes                                                                                                                                              | <input type="checkbox"/> Misaligned/off center                                                                                                                                                                                                                                                                | <input type="checkbox"/> Turning Sequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |
| <p>Substation <input type="checkbox"/></p> <p>Past Expiry Date <input type="checkbox"/></p> <p>Misidentified <input type="checkbox"/></p>                                         |                                                                                                                                                                                                                                                                                                               | <p>Process Improvement <input type="checkbox"/></p> <p>Manufacturing Process <input type="checkbox"/></p> <p>Past Due <input type="checkbox"/></p> <p>OTHER : _____</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                      |                |  |  |                                           |                                           |                                           |                                    |                                        |                                             |                                    |                                    |                                               |                                               |                               |                                         |                                                            |                                              |                                            |                                        |                                          |                                     |                                      |                                  |                                  |                                        |                                     |                                 |                                                          |                                       |                                  |                                      |                                                |                                           |  |  |  |                                              |  |                              |  |





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER PO038999

*Drop Ship*  
*to Group Altech PO 39002*

Supplier: MEI001-VC  
Metcor Inc.  
560 Boul. Arthur Sauve  
Saint-Eustache  
QC  
J7R 5A8 Canada  
Phone: 450 473 1884  
Fax: 450 491 5498

PO No: PO038999  
PO Date: 2/8/18  
Due Date: 2/13/18  
Purchase Order  
Revision:  
Revision Date:  
Ship-To Contact: Baker, Diane  
Phone: dbaker@dartaero.com

**E-MAILED**  
**FEB-13-2018**

Ship To: 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

Via: Ground  
Pymt Terms: Net 30  
Freight Terms:  
Special Comments:

| Items     |        |                  |                                                                                                                                                                                                                                                                                                |        |          |                |                   |         |                  |                |
|-----------|--------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|----------------|-------------------|---------|------------------|----------------|
| Line Item | Job    | Part             | Description                                                                                                                                                                                                                                                                                    | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
| 1         | 170907 | C3-12-1          | Lock Bushing<br>1-Issue P/O to Metcore ;<br>P/O _____<br>HEAT TREAT TO T4/T42<br>CONDITION<br>MIN. UTS=30 KSI (60 HREW<br>MIN)<br>NOTE: DETAIL C OF C<br>REQUIRED<br>Part made from 4140 Round<br>Bar .750<br><br>Metcore to ship directly to<br>Groupe Altech                                 | Firmed | 2/13/18  | 40 pcs         | 0 pcs             | 40 pcs  | \$7.50/pcs       | \$300.00       |
| 2         | 170175 | RBW6705G02131-3G | Rigging Pin Assembly N2<br>1--Issue P/O to Metcore ;<br>P/O _____<br>RC: 26-30<br>2-Bead blast<br>3- Certificate of Conformity is<br>required<br>***NOTE*** DROP SHIP TO<br>FINISHER<br>To ship directly to Groupe<br>Altech<br>Part made from 01R Tool Steel<br>Ship Directly to Group Altech | Firmed | 2/13/18  | 6 pcs          | 0 pcs             | 6 pcs   | \$25.00/pcs      | \$150.00       |
| 3         | 170178 | RBW6705G02231-3G | Rigging Pin Assembly N3<br>1--Issue P/O to Metcore ;<br>P/O _____<br>RC: 26-30<br>2-Bead blast<br>3- Certificate of Conformity is<br>required<br>***NOTE*** DROP SHIP TO<br>FINISHER<br>To ship directly to Groupe                                                                             | Firmed | 2/13/18  | 4 pcs          | 0 pcs             | 4 pcs   | \$25.00/pcs      | \$100.00       |



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER PO038999

| Items     |        |                  |                                                                                                                                                                                                                                                                                                 |        |          |                |                   |         |                  |
|-----------|--------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|----------------|-------------------|---------|------------------|
| Line Item | Job    | Part             | Description                                                                                                                                                                                                                                                                                     | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) |
| 4         | 170181 | RBW6705G02331-3G | Altech<br>Part made from 01R Tool Steel<br>Rigging Pin Assembly N4<br>1--Issue P/O to Metcore ;<br>P/O _____<br>RC: 26-30<br>2-Bead blast<br>3- Certificate of Conformity is required<br>***NOTE*** DROP SHIP TO FINISHER<br>To ship directly to Groupe Altech<br>Part made from 01R Tool Steel | Firmed | 2/13/18  | 2 pcs          | 0 pcs             | 2 pcs   | \$25.00/pcs      |
| 5         | 171452 | D4202-1          | Spacer<br>HEAT TREAT TO T4/T42 CONDITION<br>MIN. UTS=30 KSI (60 HREW MIN)<br>NOTE: DETAIL C OF C REQUIRED<br>Part made from 6061-T6 Round Tube .500x.058W                                                                                                                                       | Firmed | 2/13/18  | 500 pcs        | 0 pcs             | 500 pcs | \$1.21362/pcs    |
| 6         | 168221 | 646.3014         | Blade<br>FINISH: HEAT TREAT TO 58-62 RC<br>ROCKWELL HARDNESS<br>PART ARE MADE FROM AISI A2 TOOL STEEL                                                                                                                                                                                           | Firmed | 2/13/18  | 11 pcs         | 0 pcs             | 11 pcs  | \$28.41/pcs      |
| 7         | 170289 | D5518-1          | Crossbolt Spacer<br>PO to Metcor:<br>HEAT TREAT TO T4/T42 CONDITION<br>MIN. UTS=30 KSI (60 HREW MIN)<br>NOTE: DETAIL C OF C REQUIRED<br>PART ARE MADE FROM 6061-T6 MATERIAL                                                                                                                     | Firmed | 2/13/18  | 50 pcs         | 0 pcs             | 50 pcs  | \$1.21362/pcs    |

Grand Total: \$1,580.00

## Order Notes

Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents



# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 325327                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

|                                                                                                                                          |                                             |                                                                                          |                                     |                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------|
| COMMANDE DU CLIENT<br>customer po                                                                                                        | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material                                                                     | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM                                           |
| 38999                                                                                                                                    | N/A                                         | AL-6061                                                                                  |                                     |                                                   |
| <div>SPÉCIFICATIONS DU PROCÉDÉ</div> <div>processing specifications</div> <div>SOL ANNEAL</div> <div>SINGLE AGING TO CONDITION T42</div> |                                             |                                                                                          |                                     |                                                   |
| EXIGENCE / requirement                                                                                                                   | SPÉCIFICATIONS / specified                  |                                                                                          | TESTS EXÉCUTÉS / performed          | RÉSULTATS DE TESTS / results                      |
| CONDUCT                                                                                                                                  | 36 - 44 %IACS                               |                                                                                          | 110<br>(60 kHz)                     | 40.8 - 42.7 %IACS                                 |
| HARDNESS                                                                                                                                 | 60 HREW MIN                                 |                                                                                          | 110                                 | 64 - 68 HREW<br>MESURE EN HR15TW = 64,5-67 HR15TW |
| QUANTITÉ<br>quantity                                                                                                                     | POIDS<br>weight                             | DESCRIPTION DES PIÈCES<br>parts description                                              |                                     |                                                   |
| 550                                                                                                                                      | 17.25                                       | D4202-1<br>(500) D4202-1 JOB. 171452<br>(50) D5518-1 JOB 170289<br><br>1 BOITE DE CARTON |                                     |                                                   |

### COMMENTAIRES / comments

SOL. ANNEAL 985F, 30 MIN

AGE HARDEN AMBIANT

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

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Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

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19 FEB 2008

T. S. M. A.

Isabel Otero  
QA Technician

METC  
12

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité

Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 325327                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

1

| COMMANDE DU CLIENT<br>customer po | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM |
|-----------------------------------|---------------------------------------------|----------------------|-------------------------------------|---------|
| 38999                             | N/A                                         | AL-6061              |                                     |         |

### SPÉCIFICATIONS DU PROCÉDÉ

processing specifications

SOL ANNEAL

SINGLE AGING TO CONDITION T42

| EXIGENCE / requirement            | SPÉCIFICATIONS / specified | TESTS EXÉCUTÉS / performed | RÉSULTATS DE TESTS / results |
|-----------------------------------|----------------------------|----------------------------|------------------------------|
| CONDUCTIVITY                      | 36 - 44 %IACS              | 110                        | 40,8 - 42,7 %IACS            |
| HARDNESS                          | 80 HREW MIN                | 110                        | 84 - 88 HREW                 |
| MESURE EN HR15TW = 84,5-87 HR15TW |                            |                            |                              |

| QUANTITÉ<br>quantity | POIDS<br>weight | DESCRIPTION DES PIÈCES<br>parts description                                                            |
|----------------------|-----------------|--------------------------------------------------------------------------------------------------------|
| 550                  | 17,25           | D4202-1<br>(500) D4202-1 JOB. 171452 - 3/9/18<br>(50) D5518-1 JOB 170289 - 3/9/18<br>1 BOITE DE CARTON |

### COMMENTAIRES / comments

APPROUVÉ par / Approved by:



DATE: 2018-02-19

APPROUVÉ